

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant:	Kas Kasravi et al.	Examiner:	Leonard Saint Cyr
Serial No.:	10/766,308	Group Art Unit:	2626/Conf. No. 1219
Filed:	January 27, 2004	Docket No.:	200901335-1
Title:	SYSTEM AND METHOD FOR COMPARATIVE ANALYSIS OF TEXTUAL DOCUMENTS		

REPLY BRIEF TO EXAMINER'S ANSWER

Mail Stop Appeal Brief – Patents

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Reply Brief is presented in response to the Examiner's Answer mailed May 27, 2010, and in support of the Notice of Appeal filed November 10, 2009, the Appeal Brief filed February 12, 2010, appealing the rejection of claims 1, 2, 3, 6, 7, 10-14, 16-21, 23, 24, 26-31, 34, and 36-40 of the above-identified application as set forth in the Final Office Action mailed August 10, 2009.

At any time during the pendency of this application, please charge any fees required or credit any overpayment due to Deposit Account No. 08-2025 pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees required to Deposit Account No. 08-2025 under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Appellant respectfully requests reconsideration and reversal of the Examiner's rejection of pending claims 1, 2, 3, 6, 7, 10-14, 16-21, 23, 24, 26-31, 33-40.

Reply Brief to Examiner's Answer

Appellant: Kas Kasravi et al.

Serial No.: 10/766,308

Filed: January 27, 2004

Docket No.: 200901335-1

Title: SYSTEM AND METHOD FOR COMPARATIVE ANALYSIS OF TEXTUAL DOCUMENTS

ARGUMENT

All arguments presented in Appellant's Brief are incorporated by reference herein. Further, Appellant responds to the Examiner's Answer as follows.

I. Reply to the Rejection of the Claims under 35 U.S.C. 101

Claims 1, 2, 3, 6, 7, 10-14, 16-21, 34, and 36-40 were rejected under 35 U.S.C. 101. The Examiner's Answer, mailed on May 27, 2010, correctly relied on the Federal Circuit's interpretation of Supreme Court precedent that "a statutory 'process' under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing." Since the mailing of the Examiner's Answer, however, The Supreme Court has held the Federal Circuit's interpretation is incorrect. *Bilski v. Kappos*, 516 U.S. __, __ (2010)(slip op. at 7)("The Court of Appeals incorrectly concluded that this Court has endorsed the machine-or-transformation test as the exclusive test.")

To properly determine whether a claimed invention complies with the statutory invention requirements of 35 U.S.C. 101, USPTO personnel must first identify whether the claim falls within at least one of the four enumerated categories of patentable subject matter recited in section 101 (i.e., process, machine, manufacture, or composition of matter).

M.P.E.P. §1206. Determining whether the claim falls within one of the four enumerated categories of patentable subject matter recited in 35 U.S.C. 101 does not end the analysis because claims directed to nothing more than abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible for patent protection. *Diamond v. Diehr*, 450 U.S. 175, 185, 209 USPQ 1, 7 (1981); accord, e.g., *Diamond v. Chakrabarty*, 447 U.S. 303, 309, 206 USPQ 193, 197 (1980); see also, *Parker v. Flook*, 437 U.S. 584, 589, 198 USPQ 193, 197 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 67-68, 175 USPQ 673, 675 (1972); cited with approval in *Bilski*, 516 U.S. at __ (slip op. at 13-15).

Additionally, the conclusion that a particular claim includes a 35 U.S.C. 101 judicial exception does not end the inquiry because the practical application of a judicial exception may qualify for patent protection. "It is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." *Diehr*, 450 U.S. at 187, 209 USPQ at 8 (emphasis in original); accord *Flook*, 437 U.S. at 590, 198 USPQ at 197; *Benson*, 409 U.S. at 67, 175 USPQ at 675. Thus,

Reply Brief to Examiner's Answer

Appellant: Kas Kasravi et al.

Serial No.: 10/766,308

Filed: January 27, 2004

Docket No.: 200901335-1

Title: SYSTEM AND METHOD FOR COMPARATIVE ANALYSIS OF TEXTUAL DOCUMENTS

"[w]hile a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be."

Diehr, 450 U.S. at 188, 209 USPQ at 8-9 (quoting *Mackay*, 306 U.S. at 94); see also *Corning v. Burden*, 56 U.S. (15 How.) 252, 268, 14 L.Ed. 683 (1854)("It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . ."). A claimed invention is directed to a practical application of a 35 U.S.C. 101 judicial exception when it: (A) "transforms" an article or physical object to a different state or thing; or (B) otherwise produces a useful, concrete and tangible result. *M.P.E.P.* §1206.

Based on this established precedent, the rejection of claims 1, 2, 3, 6, 7, 10-14, 16-21, 34, and 36-40 is improper and should be reversed. These claims were rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention because the claims did not pass the machine or transformation test. These claims, however, define features of "a computer implemented method," i.e., a process under 35 U.S.C. 101. First, the claims are tied to a machine because the computerized methods includes the feature of "processing . . . by a digital computer." Second, these claims are not directed to one of the judicially created exceptions to a patentable process because they do not define abstract ideas (such as mathematical algorithms), natural phenomena, or laws of nature. Given the more expansive definition of a process described in the Supreme Court precedents described above overturning the Federal Circuit's analysis applied in the Examiner's Answer, Appellant submits that claims define patentable subject matter.

Accordingly, Appellant requests removal of the rejection of claims 1, 2, 3, 6, 7, 10-14, 16-21, 34, and 36-40.

II. Reply to the Rejection under 35 U.S.C 102(a)

Claims 1, 2, 3, 6, 7, 10-14, 16-21, 23, 24, 26-31, and 36-40 were rejected under 35 U.S.C. 102(a) as being anticipated by the Gillis U.S. Patent No. 6,523,026 (the Gillis Patent). This rejection includes independent claims 1, 14, 23, 24, 26, and 27. The examiner's Answer, on page 11, states, "Appellants argue that the cited teaching of the Gillis patent is taken out of context . . . Accordingly, this cited feature is not to be included with the features of the Gillis patent cited against the claims."

Reply Brief to Examiner's Answer

Appellant: Kas Kasravi et al.

Serial No.: 10/766,308

Filed: January 27, 2004

Docket No.: 200901335-1

Title: SYSTEM AND METHOD FOR COMPARATIVE ANALYSIS OF TEXTUAL DOCUMENTS

Despite the modified rejection, the cited teachings of the Gillis Patent are still taken out of context because the Gillis Patent uses terms similar to that in the rejected claims, but the terms used in the Gillis Patent do not correspond to the features of the rejected claims. For example, claim 1 sets forth “defining a semantic vector for each document . . . said semantic vector having multiple components” each component including “a term,” and “a weighing factor . . . of said term,” and similar or analogous features are included in independent claims 14, 23, 24, 26, and 27. Claim 1 also includes the features of “a frequency value relating to a number of occurrences of said term,” and similar or analogous features are included in independent claims 14, 24, and 26.

The Gillis Patent does not describe these features as claimed. Rather than defining a “semantic vector” as claimed, the Gillis Patent teaches using term vectors representing the domain specific relationships between terms. These term vectors include a single term (cited in the Examiner’s Answer at column 11, lines 36-40), rather than multiple components each including a term as claimed above. In addition, rather than defining “a weighing factor . . . of said term” as set forth above, the Gillis Patent teaches that weighing of terms relate to multi-term queries (cited in the Examiner’s Answer at column 42, line 67 to column 43, line 1), rather than to the term vectors cited earlier in the reference. Also, rather than teaching including a “frequency value” in the claimed semantic vector, the Gillis Patent describes a frequency related weighing scheme in computing summary vectors for records and queries, which are also different from the term vectors first identified above (as cited in the Examiner’s Answer at column 41, lines 41-47). Each one of the allegedly claimed features of a component in a multiple component semantic vector is found in a different aspect of the method of retrieving documents described in the Gillis Patent, and is not otherwise found together or taught in the manner as claimed.

Furthermore, the rejected independent claim 1 sets forth “comparing a semantic vector of an identified document to the semantic vector for each document in the plurality of documents to determine at least one document semantically similar to the identified document,” and similar features are set forth in independent claims 14, 23, 24, 26, and 27. The Examiner’s answer cites the Gillis Patent at column 33, line 66 to column 34, line 9, as teaching the claimed feature. This teaching in the Gillis Patent, however, is not directed to the semantic vectors having multiple components as claimed but to the single item term vectors to determine if a term (rather than a document as claimed) has a similarity of

Reply Brief to Examiner's Answer

Appellant: Kas Kasravi et al.

Serial No.: 10/766,308

Filed: January 27, 2004

Docket No.: 200901335-1

Title: SYSTEM AND METHOD FOR COMPARATIVE ANALYSIS OF TEXTUAL DOCUMENTS

meaning. Again, the cited teachings of the Gillis Patent do not teach the features of the independent claims.

Accordingly, Appellant submits that claims 1, 2, 3, 6, 7, 10-14, 16-21, 23, 24, 26-31, and 36-40 are patentably distinguishable over the Gillis Patent and requests removal of the rejection and allowance of the claims.

Reply Brief to Examiner's Answer

Appellant: Kas Kasravi et al.

Serial No.: 10/766,308

Filed: January 27, 2004

Docket No.: 200901335-1

Title: SYSTEM AND METHOD FOR COMPARATIVE ANALYSIS OF TEXTUAL DOCUMENTS

CONCLUSION

For the above reasons, Appellant respectfully submits that the art of record neither anticipates nor renders obvious the claimed invention. Thus, the claimed invention does patentably distinguish over the art of record. Appellant, therefore, respectfully submits that the above rejections are not correct and should be withdrawn, and respectfully requests that the Examiner be reversed and that all pending claims be allowed.

Any inquiry regarding this Reply Brief should be directed to Patrick G. Billig at Telephone No. (612) 573-2003, Facsimile No. (612) 573-2005.

Respectfully submitted,

Kas Kasravi et al.,

By their attorneys,

DICKE, BILLIG & CZAJA, PLLC

Fifth Street Towers, Suite 2250

100 South Fifth Street

Minneapolis, MN 55402

Telephone: (612) 573-2003

Facsimile: (612) 573-2005

Date: July 27, 2010

PGB:RH:cmj

/Patrick G. Billig/

Patrick G. Billig

Reg. No. 38,080